

Index to Volume 109



The Auk 109(4):950-962, 1992

COMPILED BY STEPHANIE A. WALKER

This index is primarily one to new information. Previously published information referred to in this volume has not been indexed unless extensive comparisons or reinterpretations are involved. For some species, especially ones not in the AOU Check-list, only scientific names have been entered. New generic, subgeneric, specific, and subspecific names are printed in **boldface** type.

- Accipiter gentilis*, 844
Acryllium vulturinum, 41-42
 Adams, Albert W., see Keating, Jeffrey F., et al.
Aethia pusilla, 576-584
 African francolins (see *Francolinus* spp.)
 Age, determination of, 444-450, 490-491; effect on breeding success, 167-172
Agelaius phoeniceus, 44-55, 126
Agelastes meleagrides, 41-42
 Ainley, David G., and Robert J. Boekelheide, Seabirds of the Farallon Islands: Ecology, dynamics, and structure of an upwelling-system community (rev.), 688-689; see also Spear, Larry, et al.
 Ainley, Marianne Gosztonyi, In memoriam: Louise De Kiriline Lawrence, 909-910
Aix sponsa, 812-818
 Alabama, 216-217, 219-220
 Alaska, 57-72, 126-132, 576-584, 896-897
 Albatross, Sooty (see *Phoebastria fusca*)
 Alberta, 488-489
Alca torda, 556-562, 844
Alectoris barbara, 358-367; *chukar*, 358-367; *graeca*, 27-28, 41-42, 358-367; *rufa*, 358-367
Alectura lathami, 41-42
 Alkon, Philip V., see Randi, Ettore, et al.
Amazona ochrocephala, 74
Ammodramus maritimus, 126; *savannarum*, 699-705, 706-710
Ammoperdix heyi, 41-42
Anas bahamensis bahamensis, 277-292; *formosa*, 465-473; *platyrhynchos*, 465-473, 844; *rubripes*, 465-473; *versicolor*, 465-473
 Anatomy and morphology of *Carpodacus erythrinus*, 637-642; *Bombicilla cedrorum*, 722-730, 807-808; *Columba livia*, 874-885; *Francolinus* spp., 24-42; *Spi-zella arborea*, 863-868; *Thamnomanes occidentalis*, 307; *Turdus migratorius*, 98-111; *Zonotrichia querula*, 863-868
 Andrews, Peter, Owls, caves and fossils. Predation, preservation and accumulation of small mammal bones in caves, with an analysis of the Pleistocene cave faunas from Westbury-sub-Mendip, Somerset, United Kingdom (rev.), 402-403
Anhinga anhinga, 843
 Ankney, C. Davison, see Gilliland, Scott G., and *Anthropoides paradisea*, 75-76; *virgo*, 75
Anthus spinoletta, 127
Antilophia galeata, 911-913
 Antshrike, Variable (see *Thamnophilus caerulescens*); Western (see *Thamnomanes occidentalis*); White-shouldered (see *Thamnophilus aethiops*)
Aphelocoma coerulescens, 95, 133-147, 585-593; *ultra-marina*, 133-147; *unicolor*, 133-147
Aptenodytes patagonicus, 758-770
Arborophila brunneopectus, 41-42; *torqueola*, 27-28
Archilochus colubris, 853-862
Ardea herodias, 843
Argusianus argus, 41-42
 Arizona, 113
 Arnold, Todd W., Continuous laying by American Coots in response to partial clutch removal and total clutch loss, 407-421
Asthenes baeri, 353
 Auklet, Least (see *Aethia pusilla*)
Auriparus flaviceps, 173-177, 179-183
 Australia, 14, 15, 800-811
 Avise, John C., see Ball, R. Martin, Jr., and ———
 Awards, Elliott Coues Award, 1991, see Wiens, John A.; William Brewster Memorial Award, 1991, see Oring, Lewis W.
 Bahamas, 277-279
 Bakken, George S., and Kimberly F. Lee, Effects of wind and illumination on behavior and metabolic rate of American Goldfinches (*Carduelis tristis*), 119-125
Balearica pavonina, 75; *regulorum*, 75
 Ball, R. Martin, Jr., and John C. Avise, Mitochondrial DNA phylogeographic differentiation among avian populations and the evolutionary significance of subspecies, 626-636
Bambusicola thoracica, 27-28, 41-42
 Bancroft, Robert P., see Flemming, Stephen P., et al.
 Barnard, Phoebe, review by, 208-209
 Barton, Tim R., see Williams, Tony D., et al.
 Bates, John M., and Robert M. Zink, Seasonal variation in gene frequencies in the House Sparrow (*Passer domesticus*), 658-662
 Beauchamp, Guy, Diving behavior in Surf Scoters and Barrow's Goldeneyes, 819-827

Index to Volume 109



The Auk 109(4):950-962, 1992

COMPILED BY STEPHANIE A. WALKER

This index is primarily one to new information. Previously published information referred to in this volume has not been indexed unless extensive comparisons or reinterpretations are involved. For some species, especially ones not in the AOU Check-list, only scientific names have been entered. New generic, subgeneric, specific, and subspecific names are printed in **boldface** type.

- Accipiter gentilis*, 844
Acryllium vulturinum, 41-42
 Adams, Albert W., see Keating, Jeffrey F., et al.
Aethia pusilla, 576-584
 African francolins (see *Francolinus* spp.)
 Age, determination of, 444-450, 490-491; effect on breeding success, 167-172
Agelaius phoeniceus, 44-55, 126
Agelastes meleagrides, 41-42
 Ainley, David G., and Robert J. Boekelheide, Seabirds of the Farallon Islands: Ecology, dynamics, and structure of an upwelling-system community (rev.), 688-689; see also Spear, Larry, et al.
 Ainley, Marianne Gosztonyi, In memoriam: Louise De Kiriline Lawrence, 909-910
Aix sponsa, 812-818
 Alabama, 216-217, 219-220
 Alaska, 57-72, 126-132, 576-584, 896-897
 Albatross, Sooty (see *Phoebastria fusca*)
 Alberta, 488-489
Alca torda, 556-562, 844
Alectoris barbara, 358-367; *chukar*, 358-367; *graeca*, 27-28, 41-42, 358-367; *rufa*, 358-367
Alectura lathami, 41-42
 Alkon, Philip V., see Randi, Ettore, et al.
Amazona ochrocephala, 74
Ammodramus maritimus, 126; *savannarum*, 699-705, 706-710
Ammoperdix heyi, 41-42
Anas bahamensis bahamensis, 277-292; *formosa*, 465-473; *platyrhynchos*, 465-473, 844; *rubripes*, 465-473; *versicolor*, 465-473
 Anatomy and morphology of *Carpodacus erythrinus*, 637-642; *Bombicilla cedrorum*, 722-730, 807-808; *Columba livia*, 874-885; *Francolinus* spp., 24-42; *Spi-zella arborea*, 863-868; *Thamnomanes occidentalis*, 307; *Turdus migratorius*, 98-111; *Zonotrichia querula*, 863-868
 Andrews, Peter, Owls, caves and fossils. Predation, preservation and accumulation of small mammal bones in caves, with an analysis of the Pleistocene cave faunas from Westbury-sub-Mendip, Somerset, United Kingdom (rev.), 402-403
Anhinga anhinga, 843
 Ankney, C. Davison, see Gilliland, Scott G., and
Anthropoides paradisea, 75-76; *virgo*, 75
Anthus spinoletta, 127
Antilophia galeata, 911-913
 Antshrike, Variable (see *Thamnophilus caerulescens*); Western (see *Thamnomanes occidentalis*); White-shouldered (see *Thamnophilus aethiops*)
Aphelocoma coerulescens, 95, 133-147, 585-593; *ultra-marina*, 133-147; *unicolor*, 133-147
Aptenodytes patagonicus, 758-770
Arborophila brunneopectus, 41-42; *torqueola*, 27-28
Archilochus colubris, 853-862
Ardea herodias, 843
Argusianus argus, 41-42
 Arizona, 113
 Arnold, Todd W., Continuous laying by American Coots in response to partial clutch removal and total clutch loss, 407-421
Asthenes baeri, 353
 Auklet, Least (see *Aethia pusilla*)
Auriparus flaviceps, 173-177, 179-183
 Australia, 14, 15, 800-811
 Avise, John C., see Ball, R. Martin, Jr., and ———
 Awards, Elliott Coues Award, 1991, see Wiens, John A.; William Brewster Memorial Award, 1991, see Oring, Lewis W.
 Bahamas, 277-279
 Bakken, George S., and Kimberly F. Lee, Effects of wind and illumination on behavior and metabolic rate of American Goldfinches (*Carduelis tristis*), 119-125
Balearica pavonina, 75; *regulorum*, 75
 Ball, R. Martin, Jr., and John C. Avise, Mitochondrial DNA phylogeographic differentiation among avian populations and the evolutionary significance of subspecies, 626-636
Bambusicola thoracica, 27-28, 41-42
 Bancroft, Robert P., see Flemming, Stephen P., et al.
 Barnard, Phoebe, review by, 208-209
 Barton, Tim R., see Williams, Tony D., et al.
 Bates, John M., and Robert M. Zink, Seasonal variation in gene frequencies in the House Sparrow (*Passer domesticus*), 658-662
 Beauchamp, Guy, Diving behavior in Surf Scoters and Barrow's Goldeneyes, 819-827

- Beehler, Bruce M., editor of book reviews, 208-214, 398-405, 683-696, 939-948; reviews by, 404-405, 694-695, 695-696, 944-945
- Behavior, activity patterns, 119-125, 223-234, 315-320; aggressive, 422-434; agonistic, 602-605, 819-827; altruistic (see Communal breeding); antipredator, 601-608; breeding, 90-97, 167-172, 192-195, 197-199, 199-201, 277-292, 407-421, 563-575, 585-593, 601-608, 697-705, 706-710, 711-721, 748-757, 786-799; copulatory, 563-575; diving, 819-827; dominance, 422-434; egg rejection, 596-598; feeding, 67, 98-111, 223-234, 235-241, 242-248, 315-320, 334-345, 758-770, 863-868; flight, 235-241, 256-267, 268-276, 500-510, 869-873, 874-885; individual distance, 203; mate guarding, 563-575; mate replacement, 280-292; mating preference, 563-575; nesting, 280-292, 556-562, 610-612, 786-799, 812-818; nest helper (see Communal breeding); parental care, 491-492, 496, 556-562, 828-846; preening, 68-69; sexual selection, 197-199, 199-201; site fidelity, 576, 578-579; 812-818; social, 277-292, 422-434, 609-619, 786-799; territorial, 194, 278; thermoregulatory, 112-118, 119-125
- Behavior of *Anas bahamensis bahamensis*, 277-292; *Bucephala islandica*, 819-827; *Calidris alpina*, 57-72; *Carduelis tristis*, 119-125; Caribbean avifauna, 148-166; *Junco phaeonotus*, 112-118; *Melanitta perspicillata*, 819-827; *Phalaenoptilus nuttallii*, 315-320; *Thamnomanes occidentalis punctitectus*, 303-305; *Turdus migratorius*, 98-111
- Behle, William H., Utah birds: Historical perspectives and bibliography (rev.), 210-211
- Behnke, Keith C., see Keating, Jeffrey F., et al.
- Bill coloration in *Taeniopygia guttata*, 13-23; effect of crowding on, 14, 15, 20; effect of diet on, 14, 15, 19-22; effect of reproduction on, 14, 15, 17-18, 20-22
- Birkhead, T. R., Sperm storage and the fertile period in the Bengalese Finch, 620-625
- Björklund, Mats, Selection of bill size proportions in the Common Rosefinch (*Carpodacus erythrinus*), 637-642
- Blackbird, Jamaican (see *Nesopsar nigerrimus*); Red-winged (see *Agelaius phoeniceus*); Yellow-headed (see *Xanthocephalus xanthocephalus*)
- Boag, Peter T., see Seutin, Gilles, et al.
- Bobolink (see *Dolichonyx oryzivorus*)
- Bobwhite, Northern (see *Colinus virginianus*)
- Bock, Walter J., see Schuchmann, Karl-L., and Boekelheide, Robert, see Ainley, David G., and Boismenu, Claire, Gilles Gauthier, and Jacques Laroche, Physiology of prolonged fasting in Greater Snow Geese (*Chen caerulescens atlantica*), 511-521
- Bombycilla cedrorum*, 722-730
- Bonasa umbellus*, 844
- Bonta, Marcia Myers, Women in the field (rev.), 211
- Borgia, Gerald, see Collis, Ken, and —
- Bowerbird, Satin (see *Ptilonorhynchus violaceus*)
- Brachyramphus marmoratus*, 844
- Brant, Black (see *Branta bernicla nigricans*)
- Branta bernicla nigricans*, 896-903
- Brazil, 786-799
- Breeding of *Anas bahamensis bahamensis*, 277-292; *Corvus brachyrhynchus hesperis*, 609-619; *Crax daubentoni*, 197-199; *Guirra guirra*, 786-799; *Grus americana*, 522-523; *Parula americana*, 215-222; *Taeniopygia guttata*, 13-23; *Troglodytes aedon*, 192-195
- Breeding season of *Aix sponsa*, 813-815; *Anas bahamensis bahamensis*, 277-292; *Crax daubentoni*, 197-199; *Dendroica coronata*, 334; *D. caerulescens*, 321-333; *D. petechia*, 249-255; *Larus occidentalis*, 242-248; *Picoides borealis*, 90-97; *Taeniopygia guttata*, 17-19
- Breeding success 167-172, 312-313, 407-421, 474-487, 488-499, 522-523, 543-545, 603, 606-607, 620-625, 697-705, 706-710, 737-740, 747-757, 812-818, 896-903
- Breeding success of *Aix sponsa*, 815-817; *Ammodramus savannarum*, 707-709; *Branta bernicla nigricans*, 896-903; *Chen caerulescens caerulescens*, 737-740; *Corvus corone corone*, 543-555; *Corvus corone cornix*, 543-555; *Dendroica coronata*, 334; *D. caerulescens*, 321-333; *D. petechia*, 249-255; *Grus americana*, 522-523; *Larus occidentalis*, 242-248; *Lonchura striata*, 620-625; *Milvus migrans*, 748-757; *M. milvus*, 748-757; *Poocetes gramineus*, 707-709; *Passerculus sandwichensis*, 707-709; *Tachycineta bicolor*, 491-492; *Zenaidura macroura*, 312-313
- Briggs, Dirk R., see Williams, Tony D., et al.
- Brigham, R. Mark, and Robert M. R. Barclay, Lunar influence on foraging and nesting activity of Common Poorwills (*Phalaenoptilus nuttallii*), 315-320
- Briskie, James V., Copulation patterns and sperm competition in the polygynandrous Smith's Longspur, 563-575
- British Columbia, 819-827
- Brittingham, Margaret C., see Karasov, William H., et al.
- Brush, Alan H., reviews by, 211-212, 403-404, 693-694
- Bubo virginianus*, 844
- Bucephala islandica*, 819-827
- Buchholz, Richard, Confusing models with tests in studies of sexual selection: Reply to Jones, 199-201
- Bugeranus carunculatus*, 74-76
- Bunting, Corn (see *Miliaria calandra*); Indigo (see *Passerina cyanea*); Reed (see *Emberiza schoeniclus*); Rustic (see *Emberiza rustica*); Siberian Meadow (see *Emberiza cioides*); Snow (see *Plectrophenax nivalis*)
- Burley, Nancy Tyler, Donald K. Price, and Richard A. Zann, Bill color, reproduction and condition ef-

- fects in wild and domesticated Zebra Finches, 13-23
- Burt, Edward H., Jr., In memoriam: Ralph Warren Dexter, 906
- Bustamante, Javier, see Viñuela, Javier, and —
- Buteo jamaicensis*, 844
- Butorides virescens*, 843
- Cacholote, Brown (see *Pseudoseisura lophotes*); Rufous-crested (see *Pseudoseisura cristata*)
- Caffrey, Carolee, Female-biased delayed dispersal and helping in American Crows, 609-619
- Calcaricus pictus*, 563-575
- Calidris alpina*, 57-72, 256, 263-264
- California, 126-127, 242-248, 609-610
- Calocitta formosa*, 136; *collicii*, 136
- Caloperdix oculea*, 27-28
- Campbell, R. Wayne, Neil K. Dawe, Ian McTaggart-Cowan, John M. Cooper, Gary W. Kaiser, and Michael C. E. McNall, The birds of British Columbia (rev.), 689-692
- Campylorhamphus trochilirostris*, 353
- Canachites canadensis*, 844
- Canada, 316-317
- Canastero, Short-billed (see *Asthenes baeri*)
- Caprimulgus vociferus*, 315-320
- Cardinal, Northern (see *Cardinalis cardinalis*)
- Cardinalis cardinalis*, 44, 56
- Carduelis flammea*, 771-785; *hornemanni*, 771-785; *tristis*, 119-125
- Carlson, Allan, and Juan Moreno, Cost of short flights in the Willow Tit measured with doubly-labeled water, 389-393
- Carmi, Nurit, Berry Pinshaw, Warren P. Porter, and Jim Jaeger, Water and energy limitations on flight duration in small migrating birds, 268-276
- Carpodacus erythrinus*, 637-642; *mexicanus*, 1-12
- Carrie, Dawn K., see Rudolph, D. Craig, et al.
- Carter, J. H., III, see Walters, Jeffrey R., et al.
- Catbird, Gray (see *Dumetella carolinensis*)
- Cate, Carel ten, and Michael Taborsky, To raise or to abandon a reduced clutch: A theoretical approach illustrated using Ringed Turtle-Doves (*Streptopelia risoria*), 594-600
- Cathartes aura*, 843
- Catreus wallichii*, 41-42
- Cavalcanti, Roberto Brandão, see Marini, Miguel Ângelo, and —
- Cepphus columba*, 844
- Cerorhinca monocerata*, 844
- Chaetura pelagica*, 44-55, 845
- Chambers, Geoffrey K., see Triggs, Susan, et al.
- Chandler, C. Ray, and Robert S. Mulvihill, Effects of age, sex, and fat level on wing loading in Dark-eyed Juncos, 235-241
- Chen caerulescens atlantica*, 511-521; *caerulescens caerulescens*, 731-747
- Chickadee, Black-capped (see *Parus atricapillus*); Boreal (see *P. hudsonicus*); Carolina (see *P. carolinensis*)
- Chordeiles minor*, 315-320, 844
- Chrysolophus pictus*, 41-42
- Ciconia ciconia*, 843
- Clench, Mary H., Pterylography of birds-of-paradise and the systematic position of Macgregor's Bird-of-paradise (*Macgregoria pulchra*), 923-928; and John R. Mathias, Intestinal transit: How can it be delayed long enough for birds to act as long-distance dispersal agents?, 933-936
- Clutch size of *Branta bernicla nigricans*, 896-903; *Corvus corone corone*, 548-549; *Corvus corone cornix*, 548-549; *Dendroica caerulescens*, 324-325; *D. petechia*, 249-255; *Fulica americana*, 407-421; *Guirra guirra*, 786-799; *Junco phaeonotus*, 112-118; *Lanius bucephalus*, 711-721; *Larus occidentalis*, 242-243; *Lonchura striata*, 621; *Streptopelia risoria*, 594-600; *Troglodytes aedon*, 192-195; *Turdus merula*, 474-487; *Coccyzus erythrophthalmus*, 844
- Coevolution, plant-bird, 106-107
- Coffey, Ben B., Jr., In memoriam: James T. Tanner, 189-190; see also Hardy, J. W., et al.
- Colaptes auratus*, 845; *campestris*, 352; *campestris*, 352
- Colinus virginianus*, 41-42, 44-55
- Collins, Charles T., In memoriam: Ramesh Maganbhai Naik, 909
- Collis, Ken, and Gerald Borgia, Age-related effects of testosterone, plumage, and experience on aggression and social dominance in juvenile male Satin Bowerbirds (*Ptilonorhynchus violaceus*), 422-434
- Colombia, 302-308
- Colorado, 368-376
- Columba caribaea*, 164; *leucocephala*, 164; *livia*, 256-267, 530-542, 874-885; *squamosa*, 164
- Columbina passerina*, 164
- Commentaries, A comment: Estimating absolute densities of flying seabirds using analysis of relative movement, see Spear, Larry, et al.; Comparing actual and random distributions of nearest neighbors, see Larkin, Ronald P.; Confusing models with tests in studies of sexual selection: Reply to Jones, see Buchholz, Richard; Exotic birds: A growing problem with no easy solution, see Temple, Stanley A.; Furthering avian conservation in Latin America, see Strahl, Stuart D.; The insurance hypothesis and the theory of clutch size in birds and in invertebrates, see Hardy, I. C. W.; Ptilochronology: Accuracy and reliability of the technique, see Murphy, Mary E.; Ptilochronology: A consideration of some empirical results and "assumptions," see Grubb, Thomas C., Jr.; Reply to Larkin, see Pearson, Scott M.; Sexual selection and the evolution of extravagant traits in birds: Problems with testing good-genes models of sexual selection, see Jones, Ian, L.
- Communal breeding in *Aphelocoma c. caerulescens*, 585; *Corvus brachyrhynchos hesperis*, 609-619; *Guirra guirra*, 786-799; *Picoides borealis*, 90-97

- Conner, Richard N., see Rudolph, D. Craig, et al.
 Conservation, 95
 Conway, Albert E., In memoriam: Maurice Broun, 908
 Cooch, E. G., D. B. Lank, R. F. Rockwell, and F. Cooke,
 Is there a positive relationship between body size
 and fecundity in Lesser Snow Geese?, 667-673
 Cooke, Fred, see Francis, Charles M., et al.; see also
 Cooch, E. G., et al.
 Cooper, John M., see Campbell, R. Wayne, et al.
 Cooperative breeding (see Communal breeding)
 Coot, American (see *Fulica americana*)
 Copeyon, Carole K., see Walters, Jeffrey R., et al.
Coragyps atratus, 843
Corvus brachyrhynchos, 136, 609-619, 845; *corone cornix*,
 543-555; *corone corone*, 543-555
Coturnix coturnix, 41-42; *coturnix africana*, 41-42; *cotur-*
nix japonica, 24-42, 85
 Cowbird, Brown-headed (see *Molothrus ater*)
 Crane, Black-crowned (see *Balearica pavonina*); Black-
 necked (see *Grus nigricollis*); Common (see *Grus*
grus); Crowned (see *Balearica pavonina*); Gray-
 crowned (see *Balearica regulorum*); Hooded (see
Grus monachas); Japanese (see *Grus japonensis*);
 Sandhill (see *Grus canadensis*); Stanley (see *An-*
thropoides paradisea); Wattled (see *Bugeranus ca-*
runculatus); Whooping (see *Grus americana*)
Crax alberti, 41-42; *globulosa*, 41-42; *daubentoni*, 197-
 199; *rubra*, 41-42, 198, 200
 Cringan, Alexander T., see Gomez-Dallmeier, Fran-
 cisco, and ———
 Crossley, Richard, see Wiedner, David A., et al.
Crossoptilon mantchuricum, 41-42
Crotophaga sulcirostris, 844
 Crow, Carrion (see *Corvus corone corone*); Hooded (see
Corvus corone cornix)
 Crowe, Anna A., see Crowe, Timothy M., et al.
 Crowe, Timothy M., Eric H. Harley, Mariola B. Jakuto-
 wicz, Joris Komen, and Anna A. Crowe, Phylo-
 genetic, taxonomic and biogeographical impli-
 cations of genetic, morphological, and behavioral
 variation in francolins (Phasianidae: *Francolinus*),
 24-42
 Croxall, John P., see Williams, Tony D., et al.
 Cruz, Alexander, see Ortega, Catherine P., and
 ———
Crypturellus boucardi, 843
 Cuckoo, Guira (see *Guira guira*)
 Curassow, Great (see *Crax rubra*); Yellow-knobbed (see
Crax daubentoni)
Cyanocitta cristata, 44, 47, 56, 135-136; *stelleri*, 135-136
Cyanocorax violaceus, 136; *cyanomelas*, 136; *yncas*, 136
Cyanolyca mirabilis, 135; *cucullata*, 135; *viridicyana*, 135-
 136
Cyanoramphus forbesi, 85
Cyrtonyx montezumae, 41-42

Dactylortyx thoracicus, 41-42
Daption capense, 843
 Davis, William E., review by, 947-948
 Dawe, Neil K., see Campbell, R. Wayne, et al.
 de Kloet, Siwo R., see Tuohy, James M., et al.
 Dean, James P., review by, 689
 Degnan, Sandie M., and Craig Moritz, Phylogeogra-
 phy of mitochondrial DNA in two species of
 white-eyes in Australia, 800-811
 Deininger, Prescott, see Love, Jamie, and ———
Delichon urbica, 253
Dendragapus obscura, 844
Dendroica caerulescens, 321-333; *castanea*, 500-510; *cor-*
onata, 334-345; *dominica*, 507; *magnolia*, 166, 853-
 862; *pennsylvanica*, 157, 165-166, 853-862; *petechia*,
 166, 221, 249-255, 334-345, 507; *striata*, 500-510
Dendrortyx leucophrys, 41-42
 Dial, Kenneth P., Avian forelimb muscles and non-
 steady flight: Can birds fly without using the
 muscles in their wings?, 874-885
 Diamond, Jared, see Obst, Bryan S., and ———
Diomedea immutabilis, 843
Dolichonyx oryzivorus, 44, 869-873
 Dove, Caribbean (see *Leptotila jamaicensis*); Common
 Ground (see *Columbina passerina*); Crested Quail
 (see *Geotrygon versicolor*); Mourning (see *Zenaida*
macroura); Rock (see *Columba livia*); Ruddy Quail
 (see *Geotrygon montana*); White-winged (see *Ze-*
naida asiatica); *Zenaida* (see *Zenaida aurita*)
 Downer, Audrey, and Robert Sutton, Birds of Jamaica:
 A photographic field guide (rev.), 398
 DuBois, Robert L., see Edwards, Holly H., et al.
 Duck, American Black (see *Anas rubripes*); Blue (see
Hymenolaimus malacorrhynchos); Mallard (see *Anas*
platyrhynchos); Wood (see *Aix sponsa*)
 Duffy, David Cameron, review by, 688-689
 Duke, Gary E., see Levey, Douglas J., and ———
Dumetella carolinensis, 157, 165, 853-862
 Dunlin (see *Calidris alpina*)
 Dunn, Peter O., and Susan J. Hannon, Effects of food
 abundance and male parental care on reproduc-
 tive success and monogamy in Tree Swallows,
 488-499
 Dyck, Jan, Reflectance spectra of plumage areas col-
 ored by green feather pigments, 293-301

 Ecology, community structure, 90-97
 Ecology of *Anas bahamensis bahamensis*, 277-292; *Parus*
caeruleus, 184; *P. major*, 184; *Picoides borealis*, 90-97
 Ecuador, 302-308
 Edwards, Holly H., Gary D. Schnell, Robert L. DuBois,
 and Victor H. Hutchison, Natural and induced
 remanent magnetism in birds, 43-56
 Eggs, laying, 324-325, 407-421, 477-478; size, 242-
 248, 310-311, 407-421, 477-478, 791, 896-903;
 physiology, 309-314
 Eggs of *Branta bernicla nigricans*, 896-903; *Fulica amer-*
icana, 407-421; *Guira guira*, 790-792; *Larus occiden-*
talis, 242-248; *Ploceus taeniopterus*, 435-443; *Turdus*
merula, 474-487; *Zenaida macroura*, 309-314

- Ellegren, Hans, Polymerase-chain-reaction (PCR) analysis of microsatellites—A new approach to studies of genetic relationship in birds, 886–895
- Emberiza cioides*, 44; *rustica*, 44; *schoeniclus*, 44
- Empidonax minimus*, 253, 853–862
- Emslie, Steven D., see Sydeman, William J., and —
- England, 476–477
- Environment, influence on *Aphelocoma c. coerulescens*, 587–588; *Anas bahamensis bahamensis*, 277–292; *Carduelis tristis*, 119–125; Caribbean avifauna, 148–166; *Guira guira*, 788–789; *Hymenolaimus malacorrhynchos*, 80–89; *Junco phaeonotus*, 112–118; *Phalaenoptilus nuttallii*, 315–320; *Phylloscopus trochilus*, 268–276; *Picoides borealis*, 90–97; *Zenaidura macroura*, 309–314
- Eudromia formosa*, 352
- Eudryptes chrysocome*, 758–770
- Eudryptula minor*, 843
- Eulampis jugularis*, 845
- Euplectes afra*, 11
- Euscarthmornis aenigma*, 916–917
- Evolution of *Alectoris barbara*, 358–367; *A. chukar*, 358–367; *A. graeca*, 358–367; *A. rufa*, 358–367; *Aphelocoma* spp., 133–147; *Francolinus* spp., 24–42
- Evolution of mating systems, 170–171; molecular, 133–147
- Excalfactoria chinensis*, 41–42
- Falco sparverius*, 844; *tinnunculus*, 253
- Farrand, John, see Pasquier, Roger F., and —
- Feathers (see Molts and plumages)
- Fecundity (see Clutch size)
- Ficedula hypoleuca*, 886–895
- Finch, Bengalese (see *Lonchura striata*); House (see *Carpodacus mexicanus*); Rosy (see *Leucosticte arctoa*); Zebra (see *Taeniopygia guttata*)
- Fjeldså, Jon, and Niels Krabbe, Birds of the High Andes (rev.), 683–686
- Fledging, success of (see Breeding success)
- Flemming, Stephen P., Peter C. Smith, Norman R. Seymour, and Robert P. Bancroft, Ospreys use local enhancement and flock foraging to locate prey, 649–654
- Flicker, Campo (see *Colaptes campestris*)
- Flint, Paul L., and James S. Sedinger, Reproductive implications of egg-size variation in the Black Brant, 896–903
- Flint, V. E., see Potapov, R. L., and —
- Florida, 722–730
- Florida caerulea*, 843
- Flycatcher, Least (see *Empidonax minimus*); Pied (see *Ficedula hypoleuca*)
- Food and feeding habits of *Aptenodytes patagonicus*, 758–770; *Bombicilla cedrorum*, 722–730; *Carpodacus mexicanus*, 1–12; *Chen caerulescens atlantica*, 511–521; *Dendroica coronata*, 334–345; *Eudryptes chrysocome*, 758–770; *Gallus gallus*, 451–464; *Larus occidentalis*, 244–248; *Oceanodroma leucorhoa*, 758–770; *Phalaenoptilus nuttallii*, 315–320; *Phoebastria fusca*, 758–770; *Procellaria aequinoctialis*, 758–770; *Pygocyclis papua*, 223–234, 758–770; *Spizella arborea*, 863–868; *Tachycineta bicolor*, 488–499; *Turdus migratorius*, 98–111; *Zonotrichia querula*, 863–868
- Foraging (see Food and feeding habits; Behavior, feeding)
- Francis, Charles M., Miriam H. Richards, Fred Cooke, and Robert F. Rockwell, Changes in survival rates of Lesser Snow Geese with age and breeding status, 731–747
- Francolin (see *Francolinus* spp.)
- Francolinus* spp., 24–42; new subgenus *Limnocolinus*, 37
- Fratercula arctica*, 844
- Fregata aquila*, 843
- Fregetta tropica*, 843
- Fulica americana*, 407–421, 844
- Fulmarus glacialis*, 843
- Fusco, Gea, see Randi, Ettore, et al.
- Gallito, Crested (see *Rhinocrypta lanceolata*)
- Galloperdix spadicea*, 27–28
- Gallus gallus*, 41–42, 451–464; *varius*, 41–42
- Gauthier, Gilles, see Boismenu, Claire, et al.
- Gavia immer*, 843
- Genetic variation (see Genetics, genetic variation)
- Genetics, 80–89, 133–147, 167–172, 173–185, 197–199, 199–201, 358–367, 465–473, 522–529, 626–636, 711–721, 800–811, 886–895; genetic variation, 35–36, 126–132, 358–361
- Genetics of *Alectoris barbara*, 358–367; *A. chukar*, 358–367; *A. graeca*, 358–367; *Anas formosa*, 465–473; *A. platyrhynchos*, 465–473; *A. rubripes*, 465–473; *A. rufa*, 356–367; *A. versicolor*, 465–473; *Aphelocoma* spp., 133–147; *Crax daubentoni*, 197–201; *Ficedula hypoleuca*, 886–895; *Geothlypis trichas*, 626–636; *Grus americana*, 73–79, 522–529; *Hirundo rustica*, 886–895; *Hymenolaimus malacorrhynchos*, 80–89; *Lanius bucephalus*, 711–721; *Marmaronetta angustirostris*, 465–473; *Melospiza melodia*, 126–132, 626–636; *Molothrus ater*, 626–636; *Picoides pubescens*, 626–636; *Pipilo erythrophthalmus*, 626–636; *Zenaidura macroura*, 626–636; *Zosterops lateralis*, 800–811; *Z. lutea*, 800–811
- Geococcyx californianus*, 844
- Geographic variation in *Alectoris chukar*, 358–359; *A. graeca*, 358–359; *Parula americana*, 215–222; *Zosterops lateralis*, 801–802; *Z. lutea*, 801–802
- Geothlypis trichas*, 626–636, 853–862
- Geotrygon montana*, 164; *versicolor*, 164
- Gill, Frank B., see Sheldon, Frederick H., et al.
- Gill, Robert E., Jr., see Handel, Colleen M., and —
- Gilliland, Scott G., and C. Davison Ankney, Estimating age of young birds with a multivariate measure of body size, 444–450
- Ginn, P. J., W. G. McIlleron, P. le S. Milstein (Com-

- pilers), The complete book of southern African birds (rev.), 208-209
- Godwit, Bar-tailed (see *Limosa lapponica*)
- Goldeneye, Barrow's (see *Bucephala islandica*)
- Gómez-Dallmeier, Francisco, and Alexander T. Cringan, Biology, conservation and management of waterfowl in Venezuela (rev.), 686
- Goose, Greater Snow (see *Chen caerulescens atlantica*); Lesser Snow (see *Chen caerulescens caerulescens*)
- Grackle, Common (*Quiscalus quiscula*); Greater Antillean (see *Quiscalus niger*)
- Groth, Jeffrey G., Further information on the genetics of bill crossing in crossbills, 383-385
- Grubb, Thomas C., Jr., Ptilochronology: A consideration of some empirical results and "assumptions," 673-676
- Grus americana*, 73-79; *canadensis*, 73-79, 201, 844; *grus*, 73-79; *japonensis*, 74-77; *monachas*, 74-77; *nigricollis*, 74-77
- Guira guira*, 786-799
- Gull, Glaucous-winged (see *Larus glaucescens*); Great Black-backed (see *L. marinus*); Western (see *L. occidentalis*)
- Gutebier, Thomas, see Rogers, Stephen P., et al.
- Guttera plumifera*, 41-42
- Gymnogyps californianus*, 844
- Gymnorhinus cyanocephalus*, 136
- Habitat of *Ammodramus savannarum*, 699-704, 707-709; *Aphelocoma c. coerulescens*, 95, 587; *Aphelocoma* spp., 133; *Calidris alpina*, 57-72; Caribbean avifauna, 148-166; *Chen caerulescens caerulescens*, 733; *Dendroica caerulescens*, 321-323; *Hymenolaimus malacorhynchos*, 80-82; *Junco phaeonotus*, 113; *Limosa lapponica*, 603; *Numenius phaeopus*, 603; *Passerculus sandwichensis*, 699-704, 707-709; *Picoides borealis*, 90-97; *Poecetes gramineus*, 699-704, 707-709; *Tachycineta bicolor*, 488-491
- Hampton, Robert R., and David F. Sherry, Food storing by Mexican Chickadees and Bridled Titmice, 665-666
- Handel, Colleen M., and Robert E. Gill, Jr., Roosting behavior of premigratory Dunlins (*Calidris alpina*), 57-72
- Hannon, Susan J., see Dunn, Peter O., and —
- Hardy, I. C. W., The insurance hypothesis and the theory of clutch size in birds and in invertebrates, 936-937
- Hardy, J. W., George B. Reynard, and Ben B. Coffey, Jr., Voices of the New World pigeons and doves (Columbiformes: Columbidae) (rev.), 400-401
- Hare, Matthew, and Gerald F. Shields, Mitochondrial-DNA variation in the polytypic Alaskan Song Sparrow, 126-132
- Harley, Eric H., see Crowe, Timothy M., et al.
- Hatching, success of (see Breeding success); timing of, 242-248, 249-255, 474-487
- Hébert, Percy N., and Spencer G. Sealy, Onset of incubation in Yellow Warblers: A test of the hormonal hypothesis, 249-255
- Hemitriccus aenigma*, 916-917; *minimus*, 916-917; *snethlagea*, 917
- Hepp, Gary R., and Robert A. Kenamer, Characteristics and consequences of nest-site fidelity in Wood Ducks, 812-818
- Heppner, Frank, see Pomeroy, Harold, and —
- Hill, Geoffrey E., Proximate basis of variation in carotenoid pigmentation in male House Finches, 1-12
- Hirundo pyrrhonota*, 44-55; *rustica*, 886-895
- Holmes, Richard T., Thomas W. Sherry, Peter P. Marra, and Kenneth E. Petit, Multiple brooding and productivity of a Neotropical migrant, the Black-throated Blue Warbler (*Dendroica caerulescens*), in an unfragmented temperate forest, 321-333
- Holt, Paul, see Wiedner, David S., et al.
- Horn, A. G., M. L. Leonard, L. Ratcliffe, S. A. Shackleton, and R. G. Weisman, Frequency variation in songs of Black-capped Chickadees (*Parus atricapillus*), 847-852
- Horsfield, Thomas, Zoological research in Java and the neighboring islands (rev.), 693-694
- Hough, Julian, see Wiedner, David S., et al.
- Howard, Richard, and Alick Moore, A complete checklist of the birds of the world (rev.), 403-404
- Howell, Thomas R., In memoriam: Bryan Steven Obst, 906-907
- Hummingbird, Ruby-throated (see *Archilochus colubris*)
- Hunter, Malcolm L., Jr., see Vickery, Peter D., et al.
- Hurricane Gilbert, 149-166
- Hutchison, Victor H., see Edwards, Holly H., et al.
- Hybrids and hybridization of *Corvus corone corone* × *Corvus corone cornix*, 543-545
- Hymenolaimus malacorhynchos*, 80-89
- Icterus galbula*, 44, 56; *leucopteryx*, 166
- Incubation and incubation period of, *Turdus merula*, 478-483
- Inskipp, Carol, and Tim Inskipp, Guide to the birds of Nepal (rev.), 694-695
- Ilichev, V. D., and V. A. Zubakin (Eds.), Handbuch der Vögel der Sowjetunion. Vol. 6/1, Charadriiformes/Lari: Stercorariidae, Laridae (Larinae und Sterninae) (rev.), 692
- Ithaginis cruentus*, 41-42
- Jackson, Jerome A., In memoriam: Norman Frederick Sloan, 189
- Jackson, Sue, Allen R. Place, and Lindsay J. Seiderer, Chitin digestion and assimilation by seabirds, 758-770
- Jackson, Wendy M., Estimating conspecific nest parasitism in the Northern Masked Weaver based on within-female variability in egg appearance, 435-443

- Jaeger, Jim, see Carmi, Nurit, et al.
- Jakutowicz, Mariola B., see Crowe, Timothy M., et al.
- Jamaica, 148-166
- James, Frances C., In memoriam: Henry M. Stevenson, 380-381
- James, Helen F., and Storrs L. Olson, Descriptions of thirty-two new species of birds from the Hawaiian Islands: Part II (rev.), 945-947; see Olson, Storrs L., and —; review by, 402-403
- Japan, 711-721
- Jay, Blue (see *Cyanocitta cristata*); Florida Scrub (see *Aphelocoma c. coerulescens*); Gray-breasted (see *Aphelocoma ultramarina*); Steller's (see *Cyanocitta stelleri*); Unicolored (see *Aphelocoma unicolor*)
- Johnson, L. Scott, Marilyn S. Merkle, and L. Henry Kermott, Experimental evidence for importance of male parental care in monogamous House Wrens, 662-664
- Johnson, Ned K., review by, 210-211
- Johnston, Richard F., Evolution in the Rock Dove: Skeletal morphology, 530-542.
- Jones, Ian L., Factors affecting survival of adult Least Auklets (*Aethia pusilla*) at St. Paul Island, Alaska, 576-584; Sexual selection and the evolution of extravagant traits in birds: Problems with testing good-genes models of sexual selection, 197-199
- Junco, Dark-eyed (see *Junco hyemalis*); Yellow-eyed (see *J. phaeonotus*)
- Junco hyemalis*, 44, 56, 235-241, 253; *phaeonotus*, 112-118
- Jung, Robin E., Individual variation in fruit choice by American Robins (*Turdus migratorius*), 98-111
- Kaiser, Gary W., see Campbell, R. Wayne, et al.
- Kamil, Alan C., review by, 209-210
- Karasov, William H., Margaret C. Brittingham, and Stanley A. Temple, Daily energy and expenditure by Black-capped Chickadees (*Parus atricapillus*) in winter, 393-395
- Kato, Akiko, see Williams, Tony D., et al.
- Keast, Allen, In memoriam: Dominic Louis Serventy, 382
- Keating, Jeffrey F., Robert J. Robel, Albert W. Adams, Keith C. Behnke, and Kenneth E. Kemp, Role of handling time in selection of extruded food morsels by two granivorous bird species, 863-868
- Kemp, Kenneth E., see Keating, Jeffrey F., et al.
- Kennamer, Robert A., see Hepp, Gary R., and —
- Kentucky, 216-217, 219-220
- Kenya, 435-443
- Kerlinger, Paul, see Wiedner, David S., et al.
- Kermott, L. Henry, see Johnson, L. Scott, et al.
- Kestrel, Eurasian (see *Falco tinnunculus*)
- Kingsford, Richard, Australian waterbirds: A field guide (rev.), 947-948
- Kinnarney, Maureen, see Sheldon, Frederick H., et al.
- Kirkconnell, Arturo, see Whittingham, Linda A., et al.
- Kite, Black (see *Milvus migrans*); Red (see *Milvus milvus*)
- Komen, Joris, see Crowe, Timothy M., et al.
- Krabbe, Niels, see Fjeldså, Jon, and —
- Lagopus lagopus*, 127; *mutus*, 41-42, 127, 844
- Lanius bucephalus*, 711-721
- Lank, D. B., see Cooch, E. G., et al.
- Larkin, Ronald P., Comparing actual and random distributions of nearest neighbors, 202-203
- Laroche, Jacques, see Boismenu, Claire, et al.
- Larsen, Tore, and Jostein Moldsvor, Antipredator behavior and breeding associations of Bar-tailed Godwits and Whimbrels, 601-608
- Larus glaucescens*, 819-827; *marinus*, 444-450, 844; *occidentalis*, 242-248
- Laybourne, Roxie C., Beth Ann Sabo, and Ann Morningstar, Basic technique for preparation of down for examination with the scanning electron microscope, 195-197
- Lee, Kimberly F., see Bakken, George S., and —
- Lekagul, Boonsong, and Philip D. Round, A guide to the birds of Thailand (rev.), 404-405
- Leonard, M. L., see Horn, A. G., et al.
- Leptotila jamaicensis*, 164
- Leptotilas crumeniferus*, 843
- Lerwa lerwa*, 27-28, 41-42
- Leucosticte arctoa*, 127
- Levey, Douglas J., and Gary E. Duke, How do frugivores process fruit? Gastrointestinal transit and glucose absorption in Cedar Waxwings (*Bombicilla cedrorum*), 722-730
- Limnocolinus*, new subgenus, 37
- Limosa lapponica*, 601-608
- Lloyd, Clare, Mark L. Tasker, and Ken Partridge, The status of seabirds in Britain and Ireland (rev.), 686
- Lodge, D. Jean, see Wunderle, Joseph M., Jr., et al.
- Lonchura striata*, 620-625
- Longmire, Jonathan L., George F. Gee, Cathy L. Hardekopf, and Graham A. Mark, Establishing paternity in Whooping Cranes (*Grus americana*) by DNA analysis, 522-529
- Longspur, Smith's (see *Calcarius pictus*)
- Lophophorus impeyanus*, 41-42
- Lophortyx californicus*, 41-42
- Lophura leucomelanos*, 41-42
- Love, Jamie, and Prescott Deiningner, Characterization and phylogenetic significance of a repetitive DNA sequence from Whooping Cranes (*Grus americana*), 73-79
- Lorenzini, Rita, see Randi, Ettore, et al.
- Macedo, Regina H., Reproductive patterns and social organization of the communal Guira Cuckoo (*Guira guira*) in central Brazil, 786-799
- Macrocephalon maleo*, 41-42

- Magnetism, 43-47, 51, 52, 54-56; migratory habits, 44, 47, 51, 52; diet, 49, 51; mass, 44, 52
- Magrath, Robert D., Roles of egg mass and incubation pattern in establishment of hatching hierarchies in the Blackbird (*Turdus merula*), 474-487
- Maine, 699-705, 706-710
- Manitoba, 733-740, 771-785
- Margaroperdix madagarensis*, 27-28, 41-42
- Marini, Miguel Ângelo and Roberto Brandão Cavalcanti, Mating systems of the Helmeted Manakin (*Antilophia galeata*) in central Brazil, 911-913
- Marmaronetta angustirostris*, 465-473
- Marra, Peter P., see Holmes, Richard T., et al.
- Marshall, Stephen J., see Triggs, Susan, et al.
- Martin, Graham, Birds by night (rev.), 401-402
- Martin, House (see *Delichon urbica*)
- Mass and measurements of *Archilochus colubris*, 853-862; *Chen caerulescens atlantica*, 513-521; *Dendroica magnolia*, 853-862; *D. pensylvanica*, 853-862; *Dumetella carolinensis*, 853-862; *Empidonax minimus*, 853-862; *Geothlypis trichas*, 853-862; *Junco hyemalis*, 235-241; *Larus marinus*, 444-450; *Molothrus ater*, 372-374; *Parus atricapillus*, 853-862; *Phylloscopus trochilus*, 268-276; *Seiurus aurocapillus*, 853-862; *Setophaga ruticilla*, 853-862; *Tachycineta bicolor*, 494; *Turdus migratorius*, 104-106; *Vermivora peregrina*, 853-862; *Vireo olivaceus*, 853-862; *Xanthocephalus xanthocephalus*, 372-374
- Mather, Monica H., and Raleigh J. Robertson, Honest advertisement in flight displays of Bobolinks (*Dolichonyx oryzivorus*), 869-873
- Mathias, John R., see Clench, Mary H., and ———
- Mating systems of *Calcarius pictus*, 563-572; *Crax daubentoni*, 199-201; *Troglodytes aedon*, 192-195
- Mayfield, Harold F., In memoriam: Milton Bernhard Trautman, 186-188
- Mayr, Ernst, In memoriam: Bernhard Rensch, 188
- McHugh, Kevin P., see Tuohy, James M., et al.
- McIlleron, W. G., see Ginn, P. J., et al.
- McKittrick, Mary C., Phylogenetic analysis of avian parental care, 828-846
- McLandress, M. Robert, In memoriam: Dennis G. Raveling, 904-905
- McNall, Michael C. E., see Campbell, R. Wayne, et al.
- McTaggart-Cowan, Ian, see Campbell, R. Wayne, et al.
- Megapodius freycinet*, 41-42
- Melanerpes carolinus*, 92; *formicivorus*, 95
- Melanitta perspicillata*, 819-827
- Melanoperdix nigra*, 41-42
- Meleagris gallopavo*, 41-42, 201, 844; *ocellata*, 41
- Melospiza lincolni*, 127; *melodia*, 126-132, 626-636
- Memorial of Maurice Broun, 908; Heinrich Dathe, 648; Louise De Kiriline Lawrence, 909-910; Ralph Warren Dexter, 906; James C. Greenway, Jr., 377-380; Olli Juhani Järvinen, 381; James R. King, 643-645; Ramesh Maganbhai Naik, 909; Bryan Steven Obst, 906-907; Hermann Rahn, 190-191; Dennis G. Raveling, 904-905; Bernhard Rensch, 188; Dominic Louis Serventy, 382; Norman Frederick Sloan, 189; Henry M. Stevenson, 380-381; James Osborne Stevenson, 648; James T. Tanner, 189-190; Milton Bernhard Trautman, 186-188; Hans Edmund Wolters, 907-908
- Merganser, Red-breasted (see *Mergus serrator*)
- Meriggi, Alberto, see Randi, Ettore, et al.
- Merkle, Marilyn S., see Johnson, L. Scott, et al.
- Metabolism of *Carduelis tristis*, 119-125; *Junco phaeonotus*, 112-118
- Michigan, 1-10, 216-217, 219
- Miliaria calandra*, 85
- Milstein, P. le S., see Ginn, P. J., et al.
- Milvus migrans*, 748-757; *milvus*, 748-757
- Mimus polyglottus*, 44, 56
- Minnesota, 854-855
- Mitu mitu, 41-42
- Mockingbird, Northern (see *Mimus polyglottus*)
- Moldenhauer, Ralph R., Two song populations of the Northern Parula, 215-222; erratum, 938
- Moldsvor, Jostein, see Larsen, Tore, and ———
- Molothrus ater*, 44-55, 368-376, 626-636
- Molts and plumages of *Aethia pusilla*, 579; *Anas bahamensis bahamensis*, 285-286; *Archilochus colubris*, 859-860; *Carduelis flammea*, 771-785; *C. hornemanni*, 771-785; *Carpodacus mexicanus*, 1-12; *Columba livia*, 196; *Corythaecola cristata*, 293-301; *Crax daubentoni*, 199-201; *Dendroica magnolia*, 859-860; *Dumetella carolinensis*, 859-860; *Empidonax minimus*, 859-860; *Geothlypis trichas*, 859-860; *Ithaginis cruentus*, 293-301; *Jacana spinosa*, 293-301; *Parus atricapillus*, 859-860; *Ptilonorhynchus violaceus*, 422-434; *Rollulus roulroul*, 293-301; *Seiurus aurocapillus*, 859-860; *Setophaga ruticilla*, 859-860; *Somateria mollissima*, 293-301; *Tauraco corythaix*, 293-301; *T. schalowi livingstoni*, 293-301; *Vermivora peregrina*, 859-860; *Vireo olivaceus*, 859-860
- Monroe, Burt L., Jr., see Sibley, Charles G., and ———
- Moore, Alick, see Howard, Richard, and ———
- Moreno, Juan, see Carlson, Allan, and ———
- Moritz, Craig, see Degnan, Sandie M., and ———
- Mortality and survival of *Aethia pusilla*, 576-584; Caribbean avifauna, 148-166; *Carpodacus erythrinus*, 637-642; *Chen caerulescens caerulescens*, 731-747; *Corvus brachyrhynchos hesperis*, 613-614; *Tachycineta bicolor*, 488-499
- Mulvihill, Robert S., see Chandler, C. Ray, and ———
- Mumme, Ronald L., see Schaub, Ron, et al.
- Munson, Erik S., and W. Douglas Robinson, Extensive folivory by Thick-billed Saltators (*Saltator maxillosus*) in southern Brazil, 917-919
- Murphy, Mary E., Ptilochronology: Accuracy and reliability of the technique, 676-680
- Murray, Bertram G., Jr., The evolutionary significance of lifetime reproductive success, 167-172
- Mycteria americana*, 843

- Naito, Yasu, see Williams, Tony D., et al.
- Navigation, 43-44
- Nelson, Harvey K., In memoriam: James Osborne Stevenson, 648
- Nest and nest site of *Aix sponsa*, 812-818; *Calidris alpina*, 57-72; *Dendroica caerulescens*, 323-324; *Fulica americana*, 407-421; *Guirra guirra*, 788-789; *Phalaenoptilus nuttallii*, 315-320; *Troglodytes aedon*, 192-195
- Nest parasitism, 435-443
- Nestling of *Guirra guirra*, 788; *Junco phaeonotus*, 112-118; *Lanius bucephalus*, 712-721; *Milvus migrans*, 748-757; *M. milvus*, 748-757; *Molothrus ater*, 360-370; *Tachycineta bicolor*, 494-499; *Xanthocephalus xanthocephalus*, 368-371
- New Hampshire, 321-333
- New Jersey, 500-510
- New Zealand, 80-89
- Nighthawk, Common (see *Chordeiles minor*)
- Nishiumi, Isao, see Yamagishi, Satoshi, et al.
- Nores, Manuel, Bird speciation in subtropical South America in relation to forest expansion and retraction, 346-357
- North Carolina, 90-97
- Northwest Territory, 738-739
- Norway, 601-608
- Nothoprocta ornata*, 843
- Notocolinus**, new subgenus, 37
- Nucifraga columbiana*, 136
- Numenius phaeopus*, 601-608
- Numida meleagris*, 41-42
- Nuthatch, White-breasted (see *Sitta carolinensis*)
- Nur, Nadav, see Spear, Larry, et al.
- Obst, Bryan S., and Jared Diamond, Ontogenesis of intestinal nutrient transport in domestic chickens (*Gallus gallus*) and its relation to growth, 451-464
- Oceanites oceanicus*, 843
- Oceanodroma leucorhoa*, 758-770, 843
- Odontophorus guttatus*, 41-42
- Ohio, 216-217
- Olson, Storrs L., and Helen F. James, Descriptions of thirty-two new species of birds from the Hawaiian Islands: Part I (rev.), 945-947; see James, Helen F., and —
- Ontario, 216-217, 219-220, 738-739, 848-849, 870-871
- Opisthocomus hoazin*, 844
- Oporornis agilis*, 500-510; *formosus*, 507; *philadelphia*, 500-510
- Oreocolinus**, new subgenus, 37
- Oreortyx pictus*, 41-42
- Oring, Lewis W., William Brewster Memorial Award for 1991, 205-206
- Oriole, Jamaican (see *Icterus leucopteryx*); Northern (see *Icterus galbula*)
- Ornamentation of *Crax daubentoni*, 197-199, 199-201
- Oreais vetula*, 41-42
- Ortega, Catherine P., and Alexander Cruz, Differential growth patterns of nestling Brown-headed Cowbirds and Yellow-headed Blackbirds, 368-376
- Otus asio*, 844
- Ovenbird (see *Seiurus aurocapillus*)
- Oxyura jamaicensis*, 844
- Pandion haliaetus*, 844
- Parabuteo unicinctus*, 74
- Parakeet, Forbes (see *Cyanoramphus forbesi*)
- Partridge, Ken, see Lloyd, Clare, et al.
- Parula, Northern (see *Parula americana*)
- Parula americana*, 215-222; *pitiayumi*, 215
- Parus ater*, 174-177, 180; *atricapillus*, 173-174, 178-179, 181-183, 847-852, 853-862; *atricristatus*, 174; *bicolor*, 174, 178-183; *caeruleus*, 116, 173-177, 180, 182-183; *carolinensis*, 44, 56, 173-178, 180-183; *dichrous*, 174-177, 180, 182-183; *hudsonicus*, 174, 179, 183; *inornatus*, 174, 179, 183; *major*, 116, 174-177, 180-183, 252; *montanus*, 174, 178-179, 183; *wolfei*, 174, 176-177, 180, 182
- Pasquier, Roger F., and John Farrand, Jr., Masterpieces of bird art: 700 years of ornithological illustration (rev.), 944-945; review by, 401-402
- Passer domesticus*, 44-56; *montanus*, 44
- Passerculus sandwichensis*, 52, 112, 699-705, 706-710
- Passerella iliaca*, 127
- Passerina cyanea*, 44, 56
- Paulson, Dennis R., review by, 689-692
- Pauxi pauxi*, 41-42
- Pearson, Scott M., Reply to Larkin, 203
- Pelecánoides urinatrix*, 843
- Penelope purpurascens*, 41-42
- Penguins, Adélie (see *Pygoscelis adeliae*); Gentoo (see *P. papua*); King (see *Aptenodytes patagonicus*); Magellanic (see *Spheniscus magellanicus*); Rockhopper (see *Eudyptes chrysocome*)
- Pennsylvania, 235-241
- Perdica argoondah*, 41-42
- Perdix perdix*, 41-42, 364
- Perisoreus canadensis*, 136
- Peterson, A. Townsend, Phylogeny and rates of molecular evolution in the *Aphelocoma* jays (Corvidae), 133-147
- Petit, Kenneth E., see Holmes, Richard T., et al.
- Petrels, White-chinned (see *Procellaria aequinoctialis*)
- Phacellodomus rufifrons*, 353; *sibilatrix*, 353
- Phalacrocorax auritus*, 843
- Phalaenoptilus nuttallii*, 315-320
- Phasianus colchicus*, 11, 41-42, 364
- Philopatry, 95
- Philortyx fasciatus*, 41-42
- Phoebe, Eastern (see *Sayornis phoebe*)
- Phoebastria fusca*, 758-770, 843
- Phoeniconaias minor*, 843
- Phoeniculus porphyreus*, 95
- Phylogeny (see Taxonomy)
- Phylogeography, 626-636

- Physiology of *Columba livia*, 874-885; *Dendroica coronata*, 337-340; *Gallus gallus*, 451-464
- Physiology, digestion, 334-345, 451-464, 727-730, 758-770; energy cost of activities, 268-276; metabolism, 340-343, 451-464, 722-730, 758-770; nutrient reserves, 455-458, 518-519
- Pica pica*, 136; *nuttallii*, 136
- Picoides borealis*, 90-97; *pubescens*, 44, 56, 626-636; *villosus*, 845
- Pigeon, Red-necked (see *Columba squamosa*); Ring-tailed (see *Columba caribaea*); White-crowned (see *Columba leucocephala*)
- Pigmentation of *Carduelis flammea*, 773-783; *C. hornemanni*, 773-783; *Carpodacus mexicanus*, 1-12; *Corythacla cristata*, 297-298; *Ithaginis cruentus*, 297-298; *Rollulus roulroul*, 297-298; *Taeniopygia guttata*, 13-23; *Tauraco corythaix*, 297-298
- Pinshow, Berry, see Carmi, Nurit, et al.
- Pintail, White-cheeked (see *Anas bahamensis*)
- Pipilo erythrophthalmus*, 626-636
- Pipit, Water (see *Anthus spinoletta*)
- Place, Allen R., and Edmund W. Stiles, Living off the wax of the land: Bayberries and Yellow-Rumped Warblers, 334-345; see also Jackson, Sue, et al.
- Plectrophenax nivalis*, 127
- Plegadis autumnalis*, 843
- Ploceus cucullatus*, 11; *taeniopyger*, 435-443
- Plumages (see Molts and —)
- Podiceps nigricollis*, 843
- Polygyny (see Mating systems)
- Polyplectron bicalcaratum*, 41-42
- Pomeroy, Harold, and Frank Heppner, Structure of turning in airborne Rock Dove (*Columba livia*) flocks, 256-267
- Poecetes gramineus*, 699-705, 706-710
- Poorwill, Common (see *Phalaenoptilus nuttallii*)
- Porter, Warren P., see Carmi, Nurit, et al.
- Potapov, R. L., and V. E. Flint (Eds.), Handbuch der Vögel der Sowjetunion. Vol. 4, Galliformes, Gruiformes (rev.), 692
- Pratt, Thane K., review by, 945-947
- Predation on *Aphelocoma c. coerulescens*, 585-593; *Calidris alpina*, 69; *Columba livia*, 256-267; *Dendroica caerulescens*, 328-329
- Přibil, Stanislav, review by, 693
- Price, Donald K., see Burley, Nancy Tyler, et al.
- Procellaria aequinoctialis*, 758-770; *parkinsoni*, 843
- Protontaria citrea*, 507
- Pseudoseisura cristata*, 353; *lophotes*, 353
- Pternistis*, new subgenus *Notocolinus*, 37; new subgenus, *Oreocolinus*, 37; new subgenus *Squamatocolinus*, 37
- Pterodroma inexpectata*, 843
- Ptilonorhynchus violaceus*, 422-434
- Ptilopachus petrosus*, 27-28, 41-42
- Ptychoramphus aleuticus*, 844
- Pucrasia macrolopha*, 41-42
- Puffinus puffinus*, 843
- Pygoscelis adeliae*, 843; *papua*, 223-234, 758-770
- Quail, Japanese (see *Coturnix c. japonica*)
- Québec, 512-513
- Quinn, Michael S., and Geoffrey L. Holroyd, Asynchronous polygyny in the House Wren (*Troglodytes aedon*), 192-195
- Quiscalus niger*, 166; *quiscula*, 44-56, 232
- Ralph, C. John, In memoriam: L. Richard Mewaldt, 646-647
- Randi, Ettore, Alberto Meriggi, Rita Lorenzini, Gea Fusco, and Philip U. Alkon, Biochemical analysis of relationships of Mediterranean *Alectoris partridges*, 358-367
- Rasmussen, Pamela C., reviews by, 686, 686-688
- Ratcliffe, Laurene M., see Horn, A. G., et al.; see Seutin, Gilles, et al.; see Whittingham, Linda A., et al.
- Razorbill (see *Alca torda*)
- Redpoll, Common (see *Carduelis flammea*); Hoary (see *Carduelis hornemanni*)
- Redstart, American (see *Setophaga ruticilla*)
- Reynard, George B., see Hardy, J. W., et al.
- Rhea, Greater (see *Rhea americana*)
- Rhea americana*, 352, 843
- Rheinartia ocellata*, 41-42
- Rhinocrypta lanceolata*, 354
- Rhizothera longirostris*, 27-28, 41-42
- Rhynchortyx cinctus*, 41-42
- Richards, Miriam H., see Francis, Charles M., et al.
- Rissa tridactyla*, 844
- Robbins, Mark B., review by, 400-401
- Robbins, Samuel D., Jr., Wisconsin birdlife. Population and distribution. Past and present (rev.), 211-212
- Robel, Robert J., see Keating, Jeffrey F., et al.
- Roberts, T. J., The birds of Pakistan. Vol. 1: Regional studies and non-Passeriformes (rev.), 695-696
- Robertson, Raleigh J., see Mather, Monica H., and —
- Robin, American (see *Turdus migratorius*)
- Robinson, W. Douglas, see Munson, Erik S., and —
- Robisson, Patrice, Vocalizations in *Aptenodytes penguins*: Application of the two-voice theory, 654-658
- Rockwell, Robert F., see Francis, Charles M., et al.; see also Cooch, E. G., et al.
- Rodwell, Steven, see Williams, Tony D., et al.
- Rogers, Stephen P., Mary Ann Schmidt, and Thomas Gutebier, An annotated bibliography on preparation, taxidermy, and collection management of vertebrates with emphasis on birds (rev.), 689
- Rollulus roulroul*, 41-42
- Rosefinch, Common (see *Carpodacus erythrinus*)
- Round, Philip D., see Lekagul, Boonsong, and —
- Rudolph, D. Craig, Richard N. Conner, Dawn K. Carrie, and Richard R. Schaefer, Experimental re-

- introduction of Red-cockaded Woodpeckers, 914-916
Rynchops niger, 844
- Saino, Nicola, and Simona Villa, Pair composition and reproductive success across a hybrid zone of Carrion Crows and Hooded Crows, 543-555
- Santa Barbara Software Products, BirdLexi (rev.), 212
- Sayornis phoebe*, 44, 56
- Schaefer, Richard R., see Rudolph, D. Craig, et al.
- Schaub, Ron, Ronald L. Mumme, and Glen E. Woolfenden, Predation on the eggs and nestlings of Florida Scrub Jays, 585-593
- Schmidt, Catherine A., see Walsberg, Glenn E., and —
- Schmidt, Mary Ann, see Rogers, Stephen P., et al.
- Schnell, Gary D., see Edwards, Holly H., et al.
- Schuchmann, Karl-L., and Walter J. Bock, In memoriam: Hans Edmund Wolters, 907-908
- Scoter, Surf (see *Melanitta perspicillata*)
- Scythebill, Red-billed (see *Campylorhamphus trochilrostris*)
- Sealy, Spencer G., see Hébert, Percy N., and —
- Sedinger, James S., see Flint, Paul L., and —
- Sedláček, K. (Ed.), Red data book of Czechoslovakia, Vol. 1—Birds (rev.), 693
- Seiderer, Lindsay J., see Jackson, Sue, et al.
- Seiurus aurocapillus*, 157, 160, 853-862; *motacilla*, 500-510; *noveboracensis*, 500-510
- Setophaga ruticilla*, 853-862
- Seutin, Gilles, Peter T. Boag, and Laurene M. Ratcliffe, Plumage variability in redpolls from Churchill, Manitoba, 771-785
- Sex, determination of, 490-491
- Seymour, Norman R., see Flemming, Stephen P., et al.
- Shackleton, S. A., see Horn, A. G., et al.
- Sheldon, Frederick H., Beth Slikas, Maureen Kinnarney, Frank B. Gill, E. Zhao, and Bengt Silverin, DNA-DNA hybridization evidence of phylogenetic relationships among major lineages of *Parus*, 173-185
- Sherry, David F., see Hampton, Robert R., and —
- Sherry, Thomas W., see Holmes, Richard T., et al.
- Shields, Gerald F., see Hare, Matthew, and —
- Shimoda, Chikashi, see Yamagishi, Satoshi, et al.
- Shrike, Bull-headed (see *Lanius bucephalus*)
- Sibley, Charles G., and Burt L. Monroe, Jr., Distribution and taxonomy of birds of the World (rev.), 939-944
- Sibley, David A., see Wiedner, David S., et al.
- Siegel-Causey, Douglas, review by, 939-944
- Silverin, Bengt, see Sheldon, Frederick H., et al.
- Sitta carolinensis*, 173-174, 178-179, 181-183
- Smallwood, John A., review by, 398-400
- Smith, Peter C., see Flemming, Stephen P., et al.
- Snethlagea minima*, 916; *minor*, 916-917
- Snow Goose, Lesser (see *Chen caerulescens caerulescens*); Greater (see *Chen caerulescens atlantica*)
- Sorenson, Lisa Guminski, Variable mating system of a sedentary tropical duck: The White-cheeked Pintail (*Anas bahamensis bahamensis*), 277-292
- South America, 346-357
- Spain, 748-757
- Sparrow, American Tree (see *Spizella arborea*); Eurasian Tree (see *Passer montanus*); Field (see *Spizella pusilla*); Fox (see *Passerella iliaca*); Grasshopper (see *Ammodramus savannarum*); Harris' (see *Zonotrichia querula*); House (see *Passer domesticus*); Lincoln's (see *Melospiza lincolni*); Savannah (see *Passerculus sandwichensis*); Seaside (see *Ammodramus maritimus*); Song (see *Melospiza melodia*); Vesper (see *Poocetes gramineus*); White-throated (see *Zonotrichia albicollis*)
- Spear, Larry, Nadav Nur, and David G. Ainley, A comment: Estimating absolute densities of flying seabirds using analyses of relative movement, 937-938; Estimating absolute densities of flying seabirds using analyses of relative movement, 385-389
- Speciation, 346-357, 363
- Spheniscus magellanicus*, 843
- Spizella arborea*, 863-868; *pusilla*, 203
- Squamatocolinus*, new subgenus, 37
- Starling, European (see *Sturnus vulgaris*)
- Steadman, David W., review by, 398
- Stercorarius parasiticus*, 844; *pomarinus*, 844
- Sterna hirundo*, 844; *pardisaea*, 114
- Stiles, Edmund W., see Place, Allen R., and —
- Storm-Petrels, Leach's (see *Oceanodroma leucorhoa*)
- Stotz, Douglas F., Specific status and nomenclature of *Hemitriccus minimus* and *Hemitriccus aenigma*, 916-917
- Strahl, Stuart D., Furthering avian conservation in Latin America, 680-682
- Streptopelia risoria*, 594-600
- Sturnus vulgaris*, 44-55, 166, 253, 256, 263-264
- Sula bassanus*, 843
- Sullivan, Kimberly A., and Wesley W. Weathers, Brood size and thermal environment influence field metabolism of nestling Yellow-eyed Juncos, 112-118
- Sutton, Robert, see Downer, Audrey, and —
- Swallow, Barn (see *Hirundo rustica*); Cliff (see *Hirundo pyrrhonota*); Tree (see *Tachycineta bicolor*)
- Sweden, 638-639
- Swift, Chimney (see *Chaetura pelagica*)
- Sydeman, William J., and Steven D. Emslie, Effects of parental age on hatching asynchrony, egg size and third-chick disadvantage in Western Gulls, 242-248
- Syrnaticus humiae*, 41-42
- Tachycineta bicolor*, 334-345, 488-499
- Taeniopygia guttata*, 201
- Tasker, Mark L., see Lloyd, Clare, et al.
- Taxonomy of *Alectoris rufa*, 358-367; *A. chukar*, 358-367; *A. graeca*, 358-367; *Auriparus flaviceps*, 182-183; *Carduelis flammea*, 772-773; *C. hornemanni*, 772-

- 773; *Francolinus* spp., 24-38; *Parus ater*, 182-183; *P. bicolor*, 181-183; *P. caeruleus*, 182-183; *P. carolinensis*, 182-183; *P. dichrous*, 182-183; *P. major*, 182-183; *P. wollweberi*, 181-183; *Thamnomanes occidentalis punctitectus*, 302-308; *Thamnophilus aethiops occidentalis*, 302-308
- Temeles, Ethan J., and Troy I. Wellicome, Weather-dependent kleptoparasitism and aggression in a raptor guild, 920-923
- Temple, Stanley A., Exotic birds: A growing problem with no easy solution, 395-397; see also Karasov, William H., et al.
- Tennessee, 216-217, 219
- Tern, Arctic (see *Sterna paradisaea*)
- Territory of *Picoides borealis*, 90-97
- Tetrao tetrix*, 41-42
- Texas, 216-217, 219-221
- Thamnomanes occidentalis*, 302-308
- Thamnophilus aethiops*, 302; *caerulescens*, 354
- Thornbird, Little (see *Phacellodomus sibilatrix*); Rufous-fronted (see *Phacellodomus rufifrons*)
- Thrasher, Brown (see *Toxostoma rufum*)
- Thrush, White-chinned, 157-160
- Thryothorus ludovicianus*, 43-55
- Tinamou, Quebracho Crested (see *Eudromia formosa*)
- Tit, Coal (see *Parus ater*); Great (see *P. major*); Grey-crested (see *P. dichrous*); Willow (see *P. montanus*)
- Titmouse, Black-crested (see *Parus atricristatus*); Bridled (see *P. wollweberi*); Plain (see *P. inornatus*); Tufted (see *P. bicolor*)
- Tomiałojć, Ludwik, The birds of Poland, their distribution and abundance (rev.), 692-693
- Toxostoma rufum*, 44, 56
- Towhee, Rufous-sided (see *Pipilo erythrophthalmus*)
- Tragopan temminckii, 41-42
- Triggs, Susan, Murray J. Williams, Stephen J. Marshall, and Geoffrey K. Chambers, Genetic structure of Blue Duck (*Hymenolaimus malacorhynchus*) populations revealed by DNA fingerprinting, 80-89
- Troglodytes troglodytes*, 127
- Tropicoperdix charltonii*, 41-42
- Tuohy, James M., Kevin P. McHugh, and Siwo R. de Kloet, Systematic relationships among some Anatini as derived from restriction-endonuclease analysis of a repeated DNA component, 465-473
- Turdus merula*, 474-487; *migratorius*, 44, 56, 98-111
- Turkey, Wild (see *Meleagris gallopavo*)
- Turtle-Dove, Ringed (see *Streptopelia risoria*)
- Tympanuchus cupido*, 41-42
- Tyrannus tyrannus*, 845
- Udvardy, Miklos, D. F., reviews by, 692, 692-693
- Uria aalge*, 844
- Väisänen, Risto A., In memoriam: Olli Juhani Järvinen, 381
- Vander Wall, Stephen B., Food hoarding in animals (rev.), 209-210
- Verdin (see *Auriparus flaviceps*)
- Vermivora peregrina*, 853-862
- Vickery, Peter D., Malcolm L. Hunter, Jr., and Jeffrey V. Wells, Use of a new reproductive index to evaluate relationship between habitat quality and breeding success, 697-705; Is density an indicator of breeding success?, 706-710
- Village, Andrew, The Kestrel (rev.), 398-400
- Viñuela, Javier, and Javier Bustamante, Effect of growth and hatching asynchrony on the fledging age of Black and Red kites, 748-757
- Vireo, Blue Mountain (see *Vireo osburni*); Jamaican White-eyed (see *V. modestus*); Red-eyed (see *V. olivaceus*)
- Vireo modestus*, 166; *olivaceus*, 853-862; *osburni*, 166
- Vleck, Carol M., In memoriam: Hermann Rahn, 190-191
- Vocalizations, 215-222
- Vocalization of *Calidris alpina*, 70; *Guirā guirā*, 790-791; *Parula americana*, 215-222; *Parus atricapillus*, 847-852; *Thamnomanes occidentalis punctitectus*, 303-305
- Vuilleumier, François, In memoriam: James T. Greenway, Jr., 377-380; review by, 683-686
- Wagner, Richard H., Confidence of paternity and parental effort in Razorbills, 556-562
- Waide, Robert B., see Wunderle, Joseph M., Jr., et al.
- Wales, 556-562
- Walsberg, Glenn E., and Catherine A. Schmidt, Effects of variable humidity on embryonic development and hatching success of Mourning Doves, 309-314; In memoriam: James R. King, 643-645
- Walters, Jeffrey R., Carole K. Copeyon, and J. H. Carter, III, Test of the ecological basis of cooperative breeding in Red-cockaded Woodpeckers, 90-97
- Warblers, Bay-breasted (see *Dendroica castanea*); Black-poll (see *Dendroica striata*); Black-throated Blue (see *Dendroica caerulescens*); Chestnut-sided (see *Dendroica pensylvanica*); Connecticut (see *Oporornis agilis*); Kentucky (see *Oporornis formosus*); Magnolia (see *Dendroica magnolia*); Mourning (*Oporornis philadelphia*); Tennessee (see *Vermivora peregrina*); Yellow (see *Dendroica petechia*); Yellow-rumped (see *Dendroica coronata*)
- Warner, Dwain W., see Winker, Kevin, et al.
- Washington, 126-127, 131
- Waterthrush, Louisiana (see *Seiurus motacilla*); Northern (see *Seiurus noveboracensis*)
- Waxwing, Cedar (see *Bombicilla cedrorum*)
- Weather, influence on (see Environment, influence on)
- Weathers, Wesley W., see Sullivan, Kimberly A., and
- Weaver, Northern Masked (see *Ploceus taeniopterus*)
- Weisbrod, A. R., see Winker, Kevin, et al.
- Weisman, R. G., see Horn, A. G., et al.
- Wellicome, Troy I., see Temeles, Ethan J., and
- Wells, Jeffrey V., see Vickery, Peter D., et al.
- Whimbrel (see *Numenius phaeopus*)
- Whip-poor-will (see *Caprimulgus vociferus*)

- Whitney, Bret M., Observations on the systematics, behavior, and vocalizations of "*Thamnomanes*" *occidentalis* (Formicariidae), 302-308
- Whittingham, Linda A., Arturo Kirkconnell, and Laurene M. Ratcliffe, Differences in song and sexual dimorphism between Cuban and North American Red-winged Blackbirds (*Agelaius phoeniceus*), 928-933
- Wiedner, David S., Paul Kerlinger, David A. Sibley, Paul Holt, Julian Hough, and Richard Crossley, Visible morning flight of Neotropical landbird migrants at Cape May, New Jersey, 500-510
- Wiens, John A., Elliott Coues Award for 1991, 206-207
- Williams, Murray J., see Triggs, Susan, et al.
- Williams, Tony D., Akiko Kato, John P. Croxall, Yasu Naito, Dirk R. Briggs, Steven Rodwell, and Tim R. Barton, Diving pattern and performance in nonbreeding Gentoo Penguins (*Pygoscelis papua*) during winter, 223-234
- Winker, Kevin, Dwain W. Warner, and A. Richard Weisbrod, Daily mass gains among woodland migrants at an inland stopover site, 853-862
- Wisconsin, 99
- Woodpecker, Acorn (see *Melanerpes formicivorus*); Downy (see *Picoides pubescens*); Pileated (see *Dryocopus pileatus*); Red-bellied (see *Melanerpes carolinus*); Red-cockaded (see *Picoides borealis*)
- Woolfenden, Glen E., see Schaub, Ron, et al.
- Wren, Carolina (see *Thryothorus ludovicianus*); Winter (see *Troglodytes troglodytes*)
- Wunderle, Joseph M., Jr., D. Jean Lodge, and Robert B. Waide, Short-term effects of Hurricane Gilbert on terrestrial bird populations on Jamaica, 148-166
- Xanthocephalus xanthocephalus*, 368-376
- Yamagishi, Satoshi, Isao Nishiumi, and Chikashi Shimoda, Extrapair fertilization in monogamous Bull-headed Shrikes revealed by DNA fingerprinting, 711-721
- Yellowthroat, Common (see *Geothlypis trichas*)
- Zann, Richard, see Burley, Nancy Tyler, et al.
- Zenaida asiatica*, 164; *aurita*, 164; *macroura*, 626-636, 844
- Zhao, E., see Sheldon, Frederick H., et al.
- Zink, Robert M., see Bates, John M., and ———
- Zonotrichia albicollis*, 203; *leucophrys oriantha*, 252; *querula*, 44, 56, 863-868
- Zosterops lateralis*, 800-811; *lutea*, 800-811

